

ture was below the average, except in New England, the upper lake region, the extreme northwest, on the southeast slope of the Rocky Mountains, over the northern plateau region, and on the north Pacific coast. In the upper lake region, on the northeast and southeast slopes of the Rocky Mountains, and along the middle and south Pacific coasts the departures were small. In the middle and south Atlantic and east Gulf states, at Key West, Fla., in the Ohio Valley and Tennessee, the lower lake region, the upper Mississippi and Missouri valleys, on the middle-eastern slope of the Rocky Mountains, and over the southern and middle plateau regions the mean was 1 to 2 below the normal, and in New England, the extreme northwest, over the northern plateau region, and along the north Pacific coast the mean was 1 to 2 above the normal temperature for the period named.

FROST.

Frost injurious to vegetation was reported as follows: On the 10th light frost occurred at Dodge City, Kans., causing some damage on low lands. Frost at Valley Head, Ala., on the 12th, 23d, and 25th nipped tender vegetation on the mountains. The cool weather of the 22d injured cotton about Palestine, Tex. Light frost at Liberty Hill, La., on the 22d and 23d injured tender vegetation. Fruit was reported slightly injured by the light frost of the 23d at Pontotoc, Miss. Frost was reported about Hendersonville, N. C., on the 24th.

The cool wave of the 22d to 24th carried the frost line to the central parts of the Gulf and south Atlantic states. No frost was reported in Texas. Frost occurred in the Sacramento valley, California, on the 11th, and in interior parts of Oregon and Washington from the 1st to 4th.

PRECIPITATION (expressed in inches and hundredths).

The distribution of precipitation over the United States and Canada for May, 1892, as determined from the reports of about 2,000 stations, is exhibited on Chart III. In the table of miscellaneous meteorological data the total precipitation and the departure from the normal are given for regular stations of the Weather Bureau. The figures opposite the names of the geographical districts in the columns for precipitation and departure from the normal show, respectively, the averages for the several districts. The normal for any district may be found by adding the departure to the current mean when the precipitation is below the normal and subtracting when above.

The normal precipitation for May is greatest in areas in eastern Texas and western Missouri, where it exceeds 6.00. It exceeds 4.00 over the greater part of the region extending from the middle and lower Missouri valleys to the middle and west coasts of the Gulf of Mexico, generally in Tennessee and North Carolina, and along the South Carolina and east Florida coasts. The normal amount is also in excess of 4.00 at points on the north Pacific coast, and in adjoining parts of southwestern Montana and northwestern Wyoming. In districts east of the Rocky Mountains other than those named the normal precipitation generally ranges from 2.00 to 4.00. Over the greater part of the plateau region and on the Pacific coast south of the 40th parallel the precipitation for May is usually less than 1.00, and over the west parts of the middle and southern plateau regions and in southern California it is less than 0.50.

In May, 1892, the greatest monthly precipitation reported was 18.48 at McAlester, Ind. T. The monthly precipitation exceeded 10.00 in extreme southwestern New York, northwestern Ohio, northeastern Indiana, north-central Illinois, extreme southwestern Michigan, southwestern Wisconsin, southern and eastern Iowa, north-central and southwestern Missouri, central and western Arkansas, eastern Oklahoma and Indian territories, northeastern Texas, eastern Kansas, and southeastern Nebraska. Over the greater part of the southern plateau region and the west part of the middle plateau region, in north-central Oregon, northwestern Montana, northwestern North Dakota, in parts of the Saskatchewan Valley, northern and eastern Ontario, in an area about Vicksburg, Miss., at points along the middle and west coasts of the Gulf of Mexico, and at Key West, Fla., the monthly precipitation was less than 1.00, and over the greater part of the southern plateau region it was less than 0.50.

DEPARTURES FROM NORMAL PRECIPITATION.

The monthly precipitation was in excess of the average amount for May from northern Texas to Minnesota and the western and southern Lake regions, in central and southern New England, and in the middle Atlantic states north of Virginia. It was also in excess on the Pacific coast and over

the Rocky Mountain and plateau regions, except in an area extending from Washington to northern Utah, over northern Montana, and from eastern Colorado over New Mexico. The greatest excess in monthly precipitation occurred in western Arkansas, where it exceeded 6.00 at Fort Smith, and the excess was more than 4.00 from eastern Iowa over southern Wisconsin, and from northern Indiana over Lake Erie. The most marked deficiency in monthly precipitation was noted at Vicksburg, Miss., where it exceeded 4.00. The deficiency was 4.00 at Galveston, Tex., and was more than 2.00 over the southern parts of the east and west Gulf states, and in southern North Carolina and eastern Maine.

Considered by districts, the average percentage of the normal in districts where the monthly precipitation was in excess was about as follows: South Pacific coast, 400; middle Pacific coast, 263; lower Lake region, 204; upper Mississippi valley, 177; Missouri Valley, 159; upper Lake region, 149; middle-eastern slope and middle plateau region, 139; middle Atlantic states, 132; Ohio Valley and Tennessee, 123; New England, 122; north Pacific coast, 121; southeastern slope, 119; northeastern slope, 116; northern plateau, 112. In districts where the precipitation was deficient the percentage of the normal was about as follows: East Gulf states, 32; Key West, Fla., 24; south Atlantic states, 72. In the west Gulf states, over the southern plateau region, and in the extreme northwest the monthly precipitation averaged about normal.

DEVIATIONS FROM AVERAGE PRECIPITATION.

The following table shows for certain stations, as reported by voluntary observers, (1) the average precipitation for May for a series of years; (2) the length of record during which the observations have been taken and from which the average has been computed; (3) the total precipitation for May, 1892; (4) the departure of the current month from the average; (5) and the extremes for May during the period of observation and the years of occurrence:

State and station.	(1) Average for the month of May.	(2) Length of record.	(3) Total for May, 1892.	(4) Departure from average.	(5) Extremes for May.			
					Greatest.		Least.	
					Am't.	Year.	Am't.	Year.
Arizona.	Inches.	Years	Inches.	Inches.	Inches.	Inches.	Inches.	Inches.
Fort Apache	0.47	16	0.36	- 0.11	1.31	1884	0.00	•
Fort Mohave	0.15	21	0.38	+ 0.23	1.20	1873	0.00	•
Whipple Barracks	0.58	21	0.85	+ 0.27	1.82	1877	0.00	•
Arkansas.								
Lead Hill	5.93	10	8.50	+ 2.57	10.56	1882	1.97	1891
California.								
Fort Bidwell	1.35	21	1.57	+ 0.22	4.66	1877	0.40	1884
Riverside	0.34	11	1.30	+ 0.96	1.99	1884	0.00	1886
Colorado.								
Las Animas	2.06	10	1.13	- 0.93	5.06	1882	0.25	1886
Florida.								
Merritts Island	4.04	14	3.13	- 0.91	11.53	1890	0.88	1886

Deviations from average precipitation—Continued.

State and station.	(1) Average for the month of May.	(2) Length of record.	(3) Total for May, 1892.	(4) Departure from average.	(5) Extremes for May.			
					Greatest.		Least.	
					Am't.	Year.	Am't.	Year.
Georgia.	Inches.	Years.	Inches.	Inches.	Inches.	1890	Inches.	1877
Forsyth.	3.13	18	2.76	- 0.37	7.31	1890	0.45	1877
Idaho.								
Boise Barracks.	1.29	18	3.51	+ 2.22	3.51	1892	0.97	1881
Fort Sherman.	1.63	9	2.15	+ 0.52	3.00	1883	0.66	1884
Illinois.								
Centralia.	3.73	12	7.02	+ 3.29	7.02	1892	2.30	1881
Indiana.								
La Fayette.	4.63	12	8.79	+ 4.16	8.79	1892	1.98	1891
Indian Territory.								
Fort Supply.	3.65	13	4.48	+ 0.83	7.84	1883	0.66	1886
Iowa.								
Cresco.	3.37	20	6.15	+ 2.78	7.89	1880	0.76	1874
Kansas.								
Independence.	4.35	20	10.64	+ 6.29	10.64	1892	0.92	1879
Salina.	3.92	9	5.75	+ 1.83	8.92	1889	0.27	1888
Louisiana.								
Grand Coteau.	5.06	9	3.83	- 1.23	14.03	1884	0.21	1889
Maine.								
Orono.	3.56	22	1.94	- 1.62	10.52	1890	1.25	1887
Maryland.								
Cumberland.	3.23	20	3.31	+ 0.08	7.13	1890	0.30	1875
Michigan.								
Kalamazoo.	4.07	16	7.04	+ 2.97	7.04	1892	1.44	1885
Missouri.								
Sedalia.	4.60	13	10.47	+ 5.87	10.47	1892	0.97	1879
Montana.								
Fort Custer.	2.04	12			5.63	1880	0.47	1885
Nebraska.								
Fort Robinson.	2.93	8	5.02	+ 2.09	6.39	1888	1.24	1886
Genoa (near).	4.08	16	6.01	+ 1.93	7.80	1877	0.83	1880
Nevada.								
Browns.	0.30	20	0.10	- 0.20	1.10	1887	0.00	*
Carson City.	0.63	14	0.54	- 0.09	2.80	1891	0.04	1880
New Hampshire.								
Hanover.	3.18	46	6.26	+ 3.08	6.26	1892	0.81	1879
New Mexico.								
Deming.	0.20	10			0.77	1885	0.00	*
Fort Wingate.	0.49	20	0.33	- 0.16	3.00	1872	0.00	1879
New York.								
Cooperstown.	3.42	38	7.82	+ 4.40	8.84	1890	0.36	1879
Platistown Barracks.	2.49	21	4.07	+ 1.58	5.00	1890	0.18	1879
North Carolina.								
Lenoir.	4.77	20	4.40	- 0.37	11.50	1873	1.60	1881, 1883
Oklahoma.								
Fort Reno.	3.86	9	7.37	+ 3.51	9.33	1885	0.31	1886
Fort Sill.	4.70	20	7.20	+ 2.50	9.74	1880	0.07	1886
Oregon.								
Bandon.	3.26	14	6.13	+ 2.87	7.79	1879	0.23	1890
Eola.	1.93	22	1.78	- 0.15	5.94	1879	0.26	1890
Pennsylvania.								
Dyberry.	3.01	22	5.79	+ 2.78	5.79	1882	0.36	1875
Grampian Hills.	4.19	20			11.60	1889	1.29	1891
Wellshborough.	5.05	13	6.69	+ 1.04	9.30	1884	1.30	1891
South Carolina.								
Statesburgh.	3.67	11	2.90	- 0.77	6.68	1888	1.24	1882
South Dakota.								
Fort Sully.	2.57	21	2.65	+ 0.08	5.05	1874	0.36	1884
Texas.								
Austin.	4.19	17	2.95	- 1.24	8.40	1885	T.	1886
Silver Falls.	1.75	6	0.70	- 1.05	4.25	1887	0.01	1886
Utah.								
Terrace.	0.40	20	0.30	- 0.10	1.20	1891	0.00	*
Vermont.								
Strafford.	3.25	19	7.00	+ 3.75	7.60	1890	0.40	1877
Virginia.								
Dale Enterprise.	5.62	12	2.88	- 2.74	12.66	1886	1.06	1880
Washington.								
Fort Townsend.	1.85	16	2.90	+ 1.05	7.81	1875	0.30	1891
West Virginia.								
Parkersburgh.	3.38	7	5.05	+ 1.67	5.84	1890	1.05	1885
Wisconsin.								
Embarass.	4.54	21	9.65	+ 5.11	9.65	1892	0.25	1891
Madison.	3.60	24	6.98	+ 3.38	9.68	1883, 1892	1.02	1877
Wyoming.								
Fort Washakie.	2.62	9	3.51	+ 0.89	5.77	1882	0.41	1887

* Frequently.

PRECIPITATION, JANUARY TO MAY, 1892.

For the period January to May, 1892, inclusive, the precipitation averaged about normal in the east Gulf states, the Ohio Valley and Tennessee, over the northern plateau region, and along the south Pacific coast. In the lower lake region, the Missouri and upper Mississippi valleys, on the northeast and middle-eastern slopes of the Rocky Mountains, and over the southern plateau region the precipitation was one-fourth to one-half greater, and in the middle Atlantic states, in the upper lake region, the extreme northwest, and over the middle plateau region it was one-tenth to two-tenths greater than usual. In New England, the south Atlantic states, at Key West, Fla., in the west Gulf states, on the southeast slope of the Rocky

Mountains, and along the north and middle Pacific coasts the precipitation was six-tenths to nine-tenths of the normal amount for the period named.

YEARS OF GREATEST PRECIPITATION FOR MAY.

At Northfield, Vt., Hanover, N. H., Buffalo, N. Y., Erie and Dyberry, Pa., Cleveland and Toledo, Ohio, Detroit and Kalamazoo, Mich., Indianapolis and La Fayette, Ind., Centralia, Ill., Saint Louis and Sedalia, Mo., Dubuque, Iowa, La Crosse and Embarrass, Wis., Independence, Kans., Boise Barracks, Idaho, Spokane, Wash., and Red Bluff and Los Angeles, Cal., the precipitation for the current month was the greatest ever reported for May. The greatest precipitation for May was noted in western Washington in 1887; in extreme southern Texas in 1885; and in western Oregon and at San Francisco, Cal., in 1879.

YEARS OF LEAST PRECIPITATION FOR MAY.

At Pensacola, Fla., the precipitation for the current month was the least ever noted for May. The least precipitation for May occurred on the north Pacific coast in 1888; from east Texas and Louisiana northwestward to the northern plateau region in 1886; in north and east parts of the Lake region in 1877; and from the lower Mississippi to the lower Missouri valleys in 1874.

EXCESSIVE PRECIPITATION.

The following tables show, by states, the number of stations reporting monthly precipitation to equal or exceed 10.00; precipitation to equal or exceed 2.50 in 24 hours; and precipitation to equal or exceed 1.00 in 1 hour in May, 1892:

Monthly precipitation to equal or exceed 10.00.

State.	Number of stations.	State.	Number of stations.
Missouri.	25	Ohio.	5
Iowa.	20	Oklahoma.	4
Arkansas.	19	Wisconsin.	4
Indiana.	12	Nebraska.	3
Kansas.	7	Kentucky.	1
Illinois.	6	Michigan.	1
Indian Territory.	6	New York.	1
Texas.	6		

Precipitation to equal or exceed 2.50 in 24 hours.

State.	Number of stations.	Dates.	State.	Number of stations.	Dates.
Missouri.	21	2, 2-3, 4, 4-5, 11-12, 12, 12-13, 13, 13-14, 14-15, 29, 30, 30-31, 31.	Indian Territory.	5	3, 5, 7-8, 8, 14, 16, 17, 31.
Oklahoma.	5	7, 7-8, 12, 12-13, 13-14, 15-16, 16-17, 30-31.	Oklahoma.	5	7, 7-8, 12, 12-13, 13-14, 15-16, 16-17, 30-31.
Arkansas.	15	17, 18, 30-31, 31.	Tennessee.	5	4, 6, 9, 19.
Texas.	15	6, 8, 15, 15-16, 16, 16-17, 30-31, 31.	Colorado.	4	7-8, 16, 27.
Iowa.	12	1, 3, 4-5, 5-8, 9, 16, 17, 17, 17-18, 18, 18.	Kansas.	4	4, 7-8, 12-13, 14.
Louisiana.	9	8-9, 9, 10,	Florida.	3	21-22, 30.
South Dakota.	9	1, 10-17, 16-18, 17, 17-18.	Michigan.	3	1, 2.
Minnesota.	7	9, 17, 17-18, 18.	Alabama.	2	18, 22.
Illinois.	6	2, 4-5, 5, 13-14.	North Dakota.	2	17-18.
Nebraska.	6	1, 8-8, 9, 16-17, 17.	South Carolina.	2	10-11, 22.
Indiana.	5	6, 18-19, 30, 30-31.	California.	1	2-3.
Florida.	3	29, 21, 30.	Kentucky.	1	18.
Iowa.	3	17, 24, 31.	Massachusetts.	1	21.
Louisiana.	3	9, 18, 31.	North Carolina.	1	18.
Alabama.	2	29.	Pennsylvania.	1	26-27.
Indian Territory.	2	3, 16, 27, 31.	Wisconsin.	1	17-18.

Precipitation to equal or exceed 1.00 in 1 hour.

State.	Number of stations.	Dates.	State.	Number of stations.	Dates.
Texas.	9	5, 8, 15, 15-16, 16, 31.	Nebraska.	2	1, 27.
Kansas.	6	12, 13, 24, 28, 30.	North Carolina.	2	11, 22.
Missouri.	5	2, 12, 14, 29.	Oklahoma.	2	7.
Arkansas.	3	9, 17, 30, 31.	Illinois.	1	2.
Colorado.	3	27, 30.	Kentucky.	1	25.
Florida.	3	29, 21, 30.	New York.	1	3.
Iowa.	3	17, 24, 31.	South Carolina.	1	29.
Louisiana.	3	9, 18, 31.	Tennessee.	1	18.
Alabama.	2	29.	Virginia.	1	21.
Indian Territory.	2	3, 16, 27, 31.	West Virginia.	1	18.

Table of excessive precipitation, May, 1892.

State and station.	Monthly rainfall 10 inches, or more.		Rainfall 2.50 inches, or more, in 24 hours.		Rainfall 1 inch, or more, in one hour.	
	Amt.	Day.	Amt.	Time.	Amt.	Day.
<i>Alabama.</i>						
Brewton	4		2.00	1 00	29	
Highland Home			1.44	1 05	29	
Maysville	2.77	18				
Warrior	2.60	22				
<i>Arkansas.</i>						
Arkadelphia	12.95	2.65	31			
Brinkley	10.00					
Conway	10.01					
Dallas	15.80	3.00	31			
Lardanelle			2.60	18		
Fayetteville	12.07	2.85	14			
Fort Smith	10.59	3.68	17	1.85	1 00	17
Hope	12.75	3.55	8-9			
Hot Springs	12.45	3.50	30-31			
Lonoke	10.37			1.00	0 30	9
Do.				1.12	1 00	31
Newport a.	12.27					
Newport b.	12.25					
Oscoda			3.95	8-9		
Ozark	12.16	2.55	17			
Ozone	14.00	2.78	17			
Pine Bluff	12.14	2.99	31			
Prescott	11.01	3.20	9			
Rogers	12.66	3.35	13-14			
Do.	2.62	30-31				
Russellville	11.26			1.69	1 30	30
Stuttgart	10.95			1.40	0 45	31
Do.	2.64	31				
Winslow	12.83	4.00	17			
<i>California.</i>						
Duarte	3.45	2-3				
<i>Colorado.</i>						
Avoca	3.24	27	3.24	1 45	27	
Brandon	3.09	16				
Chivington	2.70	8				
Crook	3.00	7-8				
Robb				1.03	1 00	27
Rocky Ford				1.00	1 00	30
<i>Florida.</i>						
Bristol				1.00	1 00	30
Ocala	3.41	21-22				
Orange City	2.65	30				
Oxford	2.93	21-22		1.80	1 00	21
Titusville				1.26	0 50	20
<i>Illinois.</i>						
Charleston	10.90	4.40	2			
Chester	2.75	13-14				
Heuinepin	12.57	3.40	2			
Do.	2.53	5				
Kankakee	10.09	3.17	2			
La Grange			2.51	5		
Ottawa	13.25	2.79	2			
Do.	3.51	4-5				
Riley	11.05					
Springfield				1.15	1 00	2
Sycamore	11.77					
Warrior	2.70	7				
<i>Indiana.</i>						
Columbia City	11.12					
Delphi	10.16					
Farmland	10.25	2.60	30			
Hawpatch	13.11	3.55	6			
Huntingburgh	11.75					
Huntington	11.48					
Indianapolis			2.73	30-31		
Logansport a	11.05					
Logansport b	10.21					
Marengo			2.50	18-19		
Marion	10.65					
Michigan City	10.51					
Point Isabel	11.70	2.70	30-31			
Wabash	10.51					
<i>Indian Territory.</i>						
Eufaula	14.42					
Healdton	18.40	2.60	5			
Do.	4.97	7-8				
Do.	4.02	14				
Do.	2.80	16	2.80	1 30	16	
Do.	3.40	31	3.40	2 00	31	
Purell	11.95					
Sapulpa	12.50	2.75	17			
Do.	2.50	31				
South McAlester	18.48	4.16	3	4.16	2 30	3
Do.	3.76	8				
Do.	2.80	17	1-13	0 50	27	
Tulsa	12.10					
<i>Iowa.</i>						
Alta a	10.39					
Blockton	11.21	2.63	1			
Do.	2.73	4				
Cedar Falls	11.00					
Cedar Rapids	10.12					
Centererville	10.57	3.00	4-5			
Do.	2.76	31	2.76	2 00	31	
Clarinda	11.55	2.50	1			
College Springs			2.70	4		
Corning b.	11.62					
Eagle Grove	10.30	2.50	17			
Fairfield	12.01					
Grinnell			2.54	1		
Havelock	15.70	3.50	4-5			

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Table of excessive precipitation—Continued.

State and station.	Monthly rainfall 10 inches, or more.		Rainfall 2.50 inches, or more, in 24 hours.		Rainfall 1 inch, or more, in one hour.	
	Amt.	Day.	Amt.	Day.	Amt.	Day.
<i>Iowa—Continued.</i>						
Havelock	3.00		8-9			
Do.	4.00	17-18				
Hopeville	10.84	3-35				
Indiana	10.47					
McCausland	10.02		2.84			
Maxon	11.38	2.87	18			
Do.						
Mount Pleasant a	11.65					
Mount Vernon	11.34					
Murray	10.32					
Muscatine	10.22	2.69	4-5			
Richland	12.64					
Seymour	12.64					
Sioux City	3.74	16-17	1 00	0 30	17	
Spirit Lake	2.57	18				
Winterset	10.70					
<i>Kansas.</i>						
Abilene						
Altoona						
Columbus	10.63					
Ells Falls						
Greensburg						
Independence	10.64	2.53	12-13			
Kellogg	12.39					
Leavenworth	10.74	3-12	7-8			
Marmaton						
Oswego						
Sedan	10.26					
Shields						
Topeka	14.10	3-84	4			
Yates Centre	11.83	3-39	14			
<i>Kentucky.</i>						
Central City						
Frankfort	10.05					
Munfordville						
<i>Louisiana.</i>						
Abbeville	2.70		9			
Franklin	3.12		10			
Grand Coteau	3.13		8-9			
Houma						
Jeanerette	3.00		9			
La Fayette	3.07		10			
Luling						
New Iberia	4.30		9			
New Orleans						
Opelousas	3.70		10			
Paincourtville	3.40		9			
Plaquemine	3.50		9			
<i>Massachusetts.</i>						
Royalston	2.88					
<i>Michigan.</i>						
Bronson	2.81		2			
Noble	2.64		2			
Parkville	2.55		1			
Vandalia	10.01					
<i>Minnesota.</i>						
Bingham Lake	3.40		18			
Bird Island	3.99		18			
Fergus Falls	4.55		18			
Granite Falls	2.66		17-18			
Jackson	3.07		17-18			
Kinbrae	3.70		17			
Northfield	2.80		9			
<i>Missouri.</i>						
Appleton City	2.50		13			
Bethany	3.10		4			
Boonville	14.88	2.57	II-12			
Carrollton	10.03	2.70	29	2.70	1 00	29
Centreville						
Do.	5.10	13-14				
Clinton	10.42					
Columbia	10.85	3.24	12-13			
Conception	11.21					
Concordia	2.75		12			
Dunnegan	11.81					
East Lynne	2.67		12-13			
Excelsior Springs	10.82					
Fayette	3.00		12-13			
Fulton	10.95					
Galt	12.57					
Harris	10.10					
Ironton						
Jefferson City	11.03	3.37	30-31			
Jerome	11.14	3.02	30-31			
Lamonte b.	10.13	2.74	12-13			
Langdon	10.81					
Linneus	10.55					
Mansfield	11.07					
Marshall	10.32	2.84	13	2.08	0 30	29
Mine La Motte						
Ni-o-sho	12.72					
New Haven	10.60					
Phillipsburgh	10.32	2.60	30			
Princeton	11.40	3.90	4-5			
Sedalia	10.47	2.65	2-3			
Steelville						
Do.	2.50	13-14				
Stellada	10.13	2.83	2	2.83	1 50	.2
Warrensburgh	10.00					
Zeitonica	2.63	13-14				

Table of excessive precipitation—Continued.

State and station.	Monthly rainfall in inches, or more.	Rainfall 2.50 inches, or more, in 24 hours.		Rainfall of 1 inch, or more, in one hour.		
		Amt.	Day.	Amt.	Time.	Day.
Nebraska.	Inches.	Inches.		Inches	h. m.	
Auburn a.	11.40					
Crete.	12.13	3.82	I	3.82	3 25	I
Fairbury.						
Haigler.			16-17	1.64	1 00	27
Hartington.		3.55	17			
Omaha.		2.80	16-17			
Plattsburgh.	14.72	3.15	S-9			
York.		2.63	8			
New York.						
Bolivar.	11.02					
South Kortright.				1.37	1 20	3
North Carolina.						
Linville.		2.93	18			
Littleton.				1.50	0 30	21
Oak Ridge.				1.41	1 00	11
North Dakota.						
Wahpeton.		3.50	17-18			
Wild Rice.		2.65	17-18			
Elyria.	10.42					
Leipsic.	10.10					
Montpelier.	10.23					
Wauseon.	11.40					
Oklahoma Territory.						
Anadarko.		2.70	7	2.38	1 00	7
Do.		2.90	12-13			
Burnett.	12.64	3.73	7-8			
Do.		2.87	13-14			
Guthrie.	10.70	2.50	12			
Do.		2.88	15-16			
Sac and Fox Agency.	10.57	2.52	7-8			
Do.		3.03	30-31			
Oklahoma City.	11.90	3.77	7-8	1.21	1 00	7
Do.		2.71	16-17			
Pennsylvania.						
Pleasant Mount.		3.20	26-27			
South Carolina.						
Blackville.		3.30	10-11			
Trial.		2.67	22	2.05	1 00	29
South Dakota.						
Brookings.		3.63	17			
Clark.		3.42	17-18			
De Smet.		2.95	16-17			
Gary.		4.25	17			
Macy.		3.07	I			
Millbank.		4.47	16-18			
Travare.		2.84	17-18			
Watertown.		3.56	17			
Wentworth.		3.21	17			
Tennessee.						
Chattanooga.				1.03	0 36	18
Columbia.		2.80	19			
Dyersburgh.		2.60	9			
Hohenwald.		2.91	6			
Lynnville.		2.80	4			
Memphis.		2.66	9			
Texas.						
Arthur City.	15.09	2.93	6			
Do.		3.10	15			
Do.		2.99	31			
Camp Eagle Pass.		2.60	15-16	2.60	2 30	15-16
Collegiate Station.				S		
Corpus Christi.				1.00	0 30	16
Corsicana b.		4.33	15			
Cuero b.		3.90	16			
Forestburgh.	11.77	3.15	31	1.41	0 10	5
Gainesville.	14.32	5.61	31			
Graham.		3.70	6			
Grape Vine.				1.28	1 00	5
Hallettsville.				6.54	6 54	6 00
Mesquite.					6 00	16
Mountain Springs.				1.93	0 50	15
Do.		3.00	8			
Nacogdoches.		5.38	31	2.00	0 30	31
Paris.	13.55	4.50	30-31			
Red River City.	12.12	3.11	16-17			
Round Rock.				1.24	1 00	8
Sulphur Springs.		2.50	31			
Weatherford.		2.75	S	2.75	1 40	8
Virginia.						
Norfolk.				1.00	1 00	21
Piedmont.				1.17	1 00	18
Dodgeville.						
Hillsborough.		2.51	17-18			
Janesville.	10.70					
Lancaster.	10.47					
Mineral Point.	11.75					

Received too late for discussion in May, 1892.

Reports received too late, &c.—Continued.

State and station.	Monthly rainfall in inches, or more.	Rainfall 2.50 inches, or more, in 24 hours.		Rainfall of 1 inch, or more, in one hour.	
		Amt.	Day.	Amt.	Day.
Ohio.	Inches.	Inches.		Inches	h. m.
Wheeler.	10.26				
Texas.					
Corsicana a.				3.26	15

Received too late for publication in April, 1892.

Station.	Maximum fall in—					
	5 min.	Date.	10 min.	Date.	1 hour.	Date.
Atlanta, Ga.	Inch. 0.17	16	Inch. 0.30	16	Inch. 0.36	16
Bismarck, N. Dak.	0.06	4	0.10	4	0.23	4
Boston, Mass.	0.10	3	0.20	3	0.55	3
Buffalo, N. Y.	0.10	17	0.20	17	0.40	17
Cincinnati, Ohio.	0.28	31	0.40	31	0.75	5
Chicago, Ill.	0.32	1	0.49	1	0.82	1
Cleveland, Ohio.	0.01	30	0.02	30	0.09	30
Denver, Colo.	0.25	5	0.46	5	0.74	5
Detroit, Mich.	0.47	30	0.52	30	0.63	30
Dodge City, Kans.	0.06	18	0.08	18	0.35	18
Duluth, Minn.	0.06	22	0.10	22	0.16	22
Eastport, Me.	0.04	9	0.07	9	0.13	9
Galveston, Tex.	0.55	31	0.65	31	0.92	31
Indianapolis, Ind.	0.20	31	0.31	31	0.38	31
Jacksonville, Fla.	0.30	31	0.50	31	0.85	31
Jupiter, Fla.	0.45	5	0.56	5	0.95	5
Kansas City, Mo.	0.10	3	0.17	3	0.44	3
Key West, Fla.	0.04	15	0.07	15	0.20	15
Marquette, Mich.	0.30	9	0.50	9	0.90	9
Memphis, Tenn.	0.17	31	0.20	31	0.46	31
Milwaukee, Wis.	0.10	11	0.15	11	0.25	II, 19
New York, N. Y.	0.20	9	0.32	9	1.13	9
New Orleans, La.	0.37	21	0.47	21	1.00	21
Norfolk, Va.	0.18	15	0.22	2, 15	0.60	2
Philadelphia, Pa.	0.15	15	0.25	15	0.67	2
Philadelphia Water Works.	0.10	6	0.15	5	0.36	6
Pittsburg, Pa.	0.05	10	0.07	10	0.20	10
Portland, Oregon.	0.16	28, 31	0.30	31	0.39	31
Saint Louis, Mo.	0.06	10	0.07	16	0.23	16
Saint Paul, Minn.	0.03	16	0.06	16	0.17	16
Salt Lake City, Utah.	0.02	3	0.04	3	0.16	3
San Diego, Cal.						
San Francisco, Cal.†	0.25	10, 11	0.35	10, 11	0.79	10, 11
Washington, D. C.	0.24	26	0.30	26	0.51	26
Wilmington, N. C.	0.20	30	0.30	30	0.70	30

• Less than 0.05 in 1 hour.

† Self-register out of order.

The following tables show the number of years for which monthly precipitation to equal or exceed 10.00 inches, daily precipitation to equal or exceed 2.50 inches, and hourly precipitation to equal or exceed 1.00 inch has been reported in the several states and territories for May during the last 22 years:

Excessive monthly precipitation.

State.	No. years noted.	State.		No. years noted.
Texas.	14	Alabama.		3
Kansas.	10	Illinois.		3
Iowa.	7	Michigan.		2
Arkansas.	6	Colorado.		2
Louisiana.	6	The Dakotas.		2
Missouri.	6	District of Columbia.		2
North Carolina.	6	Indiana.		2
Nebraska.	5	Maine.		2
Florida.	4	Maryland.		2
Georgia.	4	Massachusetts.		2
Mississippi.	4	Montana.		2
South Carolina.	4	New Hampshire.		2
Virginia.	4	New Jersey.		2

Excessive monthly precipitation—Continued.

State.	No. years noted.	State.	No. years noted.
New York	2	Delaware	0
Ohio	2	Idaho	6-33
Pennsylvania	2	Indian Territory	6-30
Tennessee	2	Nevada	6-25
Wisconsin	2	New Mexico	6-16
California	1	Oregon	6-13
Kentucky	1	Rhode Island	6-08
Minnesota	1	Utah	6-04
Washington	1	Vermont	6-03
Arizona	0	West Virginia	6-02
Connecticut	0	Wyoming	25-26, 1889

Excessive daily precipitation (24 hours).

Kansas	18	Massachusetts	4
Texas	16	Ohio	5-62
Alabama	12	Kentucky	5-61
Illinois	12	Montana	5-59
North Carolina	12	Rhode Island	5-53
South Carolina	12	Wisconsin	5-53
Florida	11	Connecticut	5-52
Iowa	10	New Jersey	5-50
Mississippi	10	New York	29, 1889
Indian Territory	9	California	5-50
Louisiana	9	Delaware	5-50
Nebraska	9	District of Columbia	30-31, 1889
Arkansas	8	Maine	5-50
The Dakotas	8	Oregon	5-50
Georgia	8	Vermont	5-50
Tennessee	8	Arizona	5-50
Maryland	7	Idaho	5-50
Michigan	7	Nevada	5-50
Indiana	6	New Hampshire	5-50
Missouri	6	New Mexico	5-50
Virginia	6	Utah	5-50
Colorado	5	Washington	5-50
Minnesota	5	West Virginia	5-50
Pennsylvania	5	Wyoming	5-50

Excessive hourly precipitation.

Kansas	16	Massachusetts	2
Texas	12	Michigan	2
Iowa	11	Minnesota	2
Nebraska	10	Missouri	2
Florida	8	Arizona	1
North Carolina	8	Montana	1
South Carolina	8	Oregon	1
Georgia	6	Vermont	1
Maryland	6	California	0
Ohio	6	Connecticut	0
Pennsylvania	6	Delaware	0
Tennessee	6	District of Columbia	0
Illinois	4	Idaho	0
Indiana	4	Maine	0
The Dakotas	4	Nevada	0
Wisconsin	4	New Hampshire	0
Alabama	3	New Jersey	0
Arkansas	3	New Mexico	0
Indian Territory	3	New York	0
Louisiana	3	Rhode Island	0
Mississippi	3	Utah	0
Virginia	3	Washington	0
Colorado	2	West Virginia	0
Kentucky	2	Wyoming	0

The following tables give exceptionally heavy monthly, daily, and hourly precipitation reported for May during the last 22 years:

Monthly.

Station and state.	Am't.	Year.	Station and state.	Am't.	Year.
Inches.			Inches.		
Melissa, Tex.	34.85	1881	Melissa, Tex.	21.95	1873
Weatherford, Tex.	27.94	1884			

Daily (24 hours).

Station and state.	Amount.	Date.	Station and state.	Amount.	Date.
Inches.			Inches.		
Columbus, Ga.	9.92	22, 1880	McConnellsburgh, Pa. . .	7.08	31, 1889
Fort Wallace, Kans.	9.30	22-23, 1874	Columbia, S. C.	6.90	20, 1886
Durham, Ark.	9.28	1, 1876	Hypoluxo, Fla.	6.89	29-30, 1890
New Frankford, Mo.	9.00	28-29, 1889	Charlesville, Pa.	6.71	31, 1889
Grampian Hills, Pa.	8.37	31, 1880	Denver, Colo.	6.70	21-22, 1876
Clarksville, Tex.	8.25	10-11, 1874	Saint Marys, Ga.	6.60	27, 1887
Weatherford, Tex.	8.00?	21, 1884	Petersburgh, Pa.	6.60	31, 1889
Blue Knob, Pa.	7.90	30-31, 1889	Hallettsville, Tex.	6.54	16, 1892
Okolona, Miss.	7.50	4, 1887	Boerne, Tex.	6.52	28, 1890
Shreveport, La.	7.37	6, 1876	Charleston, S. C.	6.38	1-2, 1883

Excessive daily precipitation—Continued.

Station and state.	Amount.	Date.	Station and state.	Amount.	Date.
Inches.			Inches.		
Little Rock, Ark.	9-10, 1882		Alum Springs, Va.	5-50	30-31, 1889
Balar, Va.	6-30	20, 1888	Shreveport, La.	5-45	21, 1884
Harrisburg, Pa.	6-25	30-31, 1889	Osage, Iowa	5-40	23-24, 1880
Fort Randall, S. Dak.	6-16	31, 1889	Coudersport, Pa.	5-40	31, 1889
Live Oak, Fla.	6-13	15, 1872	Barnegat, N. J.	5-39	31, 1873
Wauseon, Ohio	6-04	29-30, 1889	Mountain Spring, Tex.	5-38	23-24, 1872
Weldon, N. C.	6-03	19, 1887	Vicksburg, Miss.	5-36	23-24, 1872
Simpsonville, S. C.	6-02	25-26, 1889	Frederick, Md.	5-25	31, 1889
Glenwood, Iowa	6-00	29, 1878	Galveston, Tex.	5-24	27-28, 1874
West Almond, N. Y.	6-00	31, 1889	Dale Enterprise, Va.	5-24	30-31, 1889
Selins Grove, Pa.	6-00	31, 1889	Luling, La.	5-20	24, 1890
Greenville, Ala.	5-85	30, 1885	Eagles Mere, Pa.	5-17	31, 1889
Emporium, Pa.	5-85	31, 1889	Fort Snelling, Minn.	5-12	31, 1877
Tuscarora, Pa.	5-81	30-31, 1889	Anderson, S. C.	5-12	19, 1886
Mobile, Ala.	5-62	29, 1883	Helena, Ark.	5-12	10, 1882
Gainesville, Tex.	5-61	31, 1892	Hollidaysburgh, Pa.	5-12	31, 1889
Upper Mattole, Cal.	5-59	5-6, 1891	Centreville, Mo.	5-10	13-14, 1892
Mayport, Fla.	5-53	3-4, 1880	Lumberton, N. C.	5-07	26-27, 1890
Spartanburg, S. C.	5-53	19, 1886	Caddo Peak, Tex.	5-05	1, 1890
Hot Springs, Ark.	5-52	27-28, 1888	Ellinwood, Kans.	5-03	17-18, 1877
Ellsworth, N. C.	5-50	22, 1884	Council Bluffs, Iowa.	5-00	31, 1875
Clarksville, Tex.	5-50	21, 1878	Emory Grove, Md.	5-00	15, 1879
Cuero, Tex.	5-50	29, 1887	Fort Niobrara, Nebr.	5-00	26, 1888
Houston, Tex.	5-50	3, 1884	Palestine, Tex.	5-00	2-3, 1884
Friendship, N. Y.	5-50	30-31, 1889	Santee, Nebr.	5-00	27, 1875
Smethport, Pa.	5-50	31, 1889	Columbia, La.	5-00	13, 1890

One hour and less.

Station and state.	Amount.	Time.	Date.
Indianapolis, Ind.	0.55	0.05	31, 1892
Jupiter, Fla.	0.50	0.05	7, 1891
Detroit, Mich.	0.48	0.05	16, 1889
Dodge City, Kans.	0.47	0.05	30, 1892
Kansas City, Mo.	0.45	0.05	5, 1892
Galveston, Tex.	0.43	0.05	5, 1890
Norfolk, Va.	0.37	0.05	21, 1892
Jupiter, Fla.	0.35	0.05	4, 1890
Savannah, Ga.	0.35	0.05	27, 1891
Do.	0.35	0.05	3, 1890
Cleveland, Ohio	0.32	0.05	1, 1892
New Orleans, La.	0.30	0.05	19, 1890
Jupiter, Fla.	0.30	0.05	31, 1891
Kansas City, Mo.	0.30	0.05	9, 1892
Memphis, Tenn.	0.30	0.05	5, 1889
San Francisco, Cal.	0.28	0.05	31, 1892
Chicago, Ill.	0.27	0.05	26, 1891
Norfolk, Va.	0.25	0.05	5, 1892
Detroit, Mich.	0.25	0.05	18, 1890
Saint Louis, Mo.	0.25	0.05	31, 1891
Washington, D. C.	0.25	0.05	5, 1892
Forestburg, Tex.	1.41	0.10	10, 1892
Mount Ida, Ark.	1.20	0.10	1, 1888
Davenport, Iowa.	0.50	0.10	3, 1888
Embarrass, Wis.	2.30	0.15	28, 1881
Oklahoma City, Okla.	1.75	0.15	20, 1891
Coatesville, Pa.	1.24	0.15	11, 1891
Toledo, Ohio.	1.10	0.15	20, 1890
La Crosse, Wis.	1.04	0.15	3, 1888
Charlotte, N. C.	1.32	0.16	12, 1891
Charleston, S. C.	1.08	0.17	12, 1883
Cumberland, Md. a.	1.60	0.20	25, 1890
Mobile, Ala.	1.64	0.20	5, 1879
Fort Riley, Kans.	1.50	0.20	14, 1885
West Leavenworth, Kans.	1.50	0.20	13, 1886
Cincinnati, Ohio.	1.14	0.20	14, 1881
Philadelphia, Pa.	1.00	0.20	20, 1889
Savannah, Ga.	0.82	0.20	19, 1888
Charlotte, N. C.	1.60	0.22	26, 1890
Palestine, Tex.	1.17	0.23	24, 1888
College Hill, Ohio.	2.38	0.30	27, 1888
Marshall, Mo.	2.08	0.30	29, 1892
Mountain Spring, Tex.	2.00	0.30	31, 1889
Smithfield, Va.	1.80	0.30	31, 1892
Shields, Kans.	1.75	0.30	30, 1892
Cumberland, Md. b.	1.75	0.38	25, 1890
West Leavenworth, Kans.	2.90	0.45	17, 1884
Fort Riley, Kans.	2.70	0.45	13, 1885
West Leavenworth, Kans.	2.70	0.45	11, 1886
Do.	2.40	0.45	12, 1884
Austin, Tex.	2.50	0.48	7, 1884
Hot Springs, Ark.	3.00	0.50	18, 1891
McCauley, Iowa.	3.90	1.00	22, 1890
Rio Grande City, Tex.	3.75	1.00	29, 1885
Bolar, Va.	3.00	1.00	24, 1890

SNOW (in inches and tenths).

The heaviest snowfall of the month was reported at Central Pacific Railroad stations in the Sierra Nevada Mountains, California, where the greatest depth, 63.0, was noted at Summit. The monthly amount exceeded 30.0 at Cross, western